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SCHISTOSOME MATERIALS FOR VACCINE DEVELOPMENT. (U)

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Schistosome Materials for Vaccine Development

by

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and

F. A. Lewis

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Faecal materials (<i>S. mansoni</i>) were received by International Health Division Research Institute in Bethesda, Maryland for immunological studies.			

This contract is funded to provide schistosomes (*Schistosoma mansoni*) life material to the Naval Medical Research Institute (NMRI). To meet the needs of the NMRI investigation, the life cycle of this parasite is maintained at the Biomedical Research Institute (BRI) and research material provided as requested.

Biomphalaria glabrata snails (Nucri substrain) were reared in 20 gallon aquaria. Snails collected from these snails were hatched and the young snails reared in shallow pans to infection size of 5 to 7 mm diameter. Each week, the following schedule was maintained. (1) 250 to 300 snails were exposed to 5 to 7 or to 1 newly-hatched miracidium each. Exposed snails were kept in a 27 to 28°C warm room. (2) Snails exposed 4 week previously were checked individually for cercarial production and thereafter patent snails were held in a warm dark room in dark covered pans. Rotifers were washed off all shedding snails. (3) 8 to 10 mice were exposed to 250 to 270 cercariae for use as the source of miracidia 7 weeks later. (4) Cercariae were harvested 4 days a week and delivered to investigators as requested.

Schistosome research materials were provided on request as follows: cercariae as a mix of both sexes; cercariae of known sex, that is, from 1 miracidium snail with a known male or female infection; snails shedding cercariae; infected mice.

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Dean, D. A., Bukowski, M. A., and Choover, A. W. 1981. Relationship between acquired resistance, portal hypertension, and lung granulomas in ten strains of mice infected with *Schistosoma mansoni*. *American Journal of Tropical Medicine and Hygiene*, 30: 805-814.

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CURRENT PRESENTATIONS BASED ON
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Dean, D. A., Mangold, B. L. Georgi, J. R., and Cioli, D. Studies on the induction and expression of resistance to schistosome infection in mice. Pontifical Academy of Sciences Study Group on "Perspectives of Immunization in Parasitic Diseases," Vatican City, Europe, 29 September - 20 October 1981.

Dean, D. A. Schistosomiasis Update: Resistance to reinfection. Thirtieth Annual Meeting of the American Society of Tropical Medicine and Hygiene, San Juan, Puerto Rico, 16-20 November 1981.

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